

Title (en)

ELECTRIC POWER SOURCE DEVICE FOR VEHICLE

Title (de)

STROMQUELLENVORRICHTUNG FÜR EIN FAHRZEUG

Title (fr)

DISPOSITIF DE SOURCE D'ALIMENTATION ÉLECTRIQUE POUR UN VÉHICULE

Publication

EP 2173018 A1 20100407 (EN)

Application

EP 08790248 A 20080722

Priority

- JP 2008001946 W 20080722
- JP 2007192807 A 20070725

Abstract (en)

An electric power source device is used in a vehicle equipped with a generator and a battery. The device includes a current detector for detecting a first current flowing in the battery, a DC-DC converter, a capacitor connected to the generator via the DC-DC converter, and a controller. The controller determines the state of charge of the battery based on a first input current detected by the current detector, and detects the running condition of the vehicle. When the vehicle decelerates, the controller controls, based on the determined state of charge of the battery, a second input current input to the capacitor via the DC-DC converter. Thereby, a regenerative electric power generated by the generator is used during the deceleration of the vehicle according to the SOC, thus utilizing the energy that is not conventionally.

IPC 8 full level

H02J 7/34 (2006.01); **B60L 3/00** (2006.01); **B60L 7/20** (2006.01); **B60L 11/18** (2006.01); **H01M 10/44** (2006.01); **H02J 7/00** (2006.01)

CPC (source: EP US)

B60L 7/16 (2013.01 - EP US); **B60L 15/2045** (2013.01 - EP US); **B60L 58/15** (2019.01 - EP US); **H01M 10/44** (2013.01 - EP US); **H01M 10/48** (2013.01 - EP US); **H02J 7/1423** (2013.01 - EP US); **H02J 7/1446** (2013.01 - EP US); **B60L 2210/10** (2013.01 - EP US); **H02J 7/345** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US); **Y02T 10/72** (2013.01 - EP US); **Y02T 10/92** (2013.01 - EP US)

Citation (search report)

See references of WO 2009013891A1

Cited by

US10239530B2; CN105191049A; EP3157132A4; FR2991824A1; EP2546094A1; US10263448B2; WO2011102727A3; WO2013182784A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2173018 A1 20100407; JP WO2009013891 A1 20100930; US 2010181828 A1 20100722; WO 2009013891 A1 20090129

DOCDB simple family (application)

EP 08790248 A 20080722; JP 2008001946 W 20080722; JP 2009524391 A 20080722; US 66583808 A 20080722